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REMARKS

In the Office Action dated March 17, 2004, claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 6-138211 (hereinafter “JP ‘211”) in view of WO 9840435 (hereinafter “WO ‘435”). The Examiner relies on JP ‘211 to show a polyoxypolyolefin type elastomer and a mixture of conductive particles. Additionally, the Examiner relies on WO ‘435 for its disclosure of a contact pad to supplement the disclosure of JP ‘211.

In response, Applicants respectfully submit that the combination of JP ‘211 and WO ‘435 neither teaches nor suggests the invention set forth in claim 11. First, claim 11 requires the contact pad to comprise an admixture of thermally conductive particles. JP ‘211 in view of WO ‘435 does not teach or suggest this limitation. JP ‘211 discloses a delamination-resistant composition containing polyoxyalkylene polyamide elastomers comprising polyamide, polystyrene, and sodium dodecylbenzenesulfonate. One skilled in the art will clearly recognize that sodium dodecylbenzenesulfonate is an anionic detergent and therefore is not a conductive particle. For the Examiner’s convenience, attached as Exhibit A is a copy of an entry for sodium dodecylbenzenesulfonate as found in the thirteenth edition of the Merck Index.


Moreover, JP ‘211 in view of WO ‘435 does not provide for the formula of the repeating unit of the elastomer shown in claim 11. As claimed, the general formula of the elastomer has a repeating unit, which defines a polyoxyolefin/siloxane co-polymer. This formula is also recited in claim 1 of the parent application, U.S. Serial Number 09/669,083, which issued as U.S. Patent No. 6,518,496 (hereinafter “‘496 patent”). For the Examiner’s convenience, attached as Exhibit B is a copy of the ‘496 patent. Consequently, the combination of JP ‘211 and WO ‘435 does not result in Applicants’ claimed invention since the combination does not provide for either an

admixture of thermally conductive particles or the general formula of the elastomer required in claim 11. Thus, as JP '211 in view of WO '435 does not render claim 11 *prima facie* obvious, withdrawal of the rejection is respectfully requested.

In light of the above, claim 11 is respectfully submitted to be patentable over JP '211 in view of WO '435. Accordingly, Applicants respectfully submit that the application is in condition for allowance which action is earnestly solicited. If for any reason the application is not deemed in condition for allowance, the Examiner is respectfully requested to contact the undersigned attorney so that additional amendments may be entered as necessary.

Applicants do not believe that any fees are due with this response. However, if any fees are due, please charge such sums to our Deposit Account 50-1145.

Respectfully submitted,



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Dihydrate. Reddish to bright orange, somewhat deliquescent crystals. Crystal system: monoclinic sphenoidal. Crystal habit: elongated prismatic. d_4^{25} 2.348. Bulk density: 96 lbs/cu ft. Becomes anhydrous on prolonged heating at $\sim 100^\circ$. The anhydrous salt mp 356.7° and starts to dec at $\sim 400^\circ$. Heat of soln -28.2 cal/g. Very sol in water. A satd aq soln contains at 0° : 70.6% $\text{Na}_2\text{Cr}_2\text{O}_7 \cdot 2\text{H}_2\text{O}$; at 20° : 73.18%; at 40° : 77.09%; at 60° : 82.04%; at 80° : 88.39%; at 100° : 91.43%. A 20% soln freezes at -3.5° , a 30% soln at -6° , a 60% soln at -26° , a 69% soln at -48° . Specific heat of 20% soln at 25° : 0.85 cal/g $^\circ\text{C}$. Solns are acidic: pH of 1% soln: 4.0; pH of 10% soln: 3.5.

Caution: Irritant and caustic to skin, mucous membranes.

USE: Oxidizing agent in manuf of dyes, many other synthetic organic chemicals, inks, etc.; in chrome-tanning of hides; in electric batteries; bleaching fats, oils, sponges, resins; refining petroleum; manuf chromic acid, other chromates and chrome pigments; in corrosion-inhibitors, corrosion-inhibiting paints; in many metal treatments; electroengraving of copper; mordant in dyeing; for hardening gelatin; for the defoliation of cotton plants and other plants and shrubs, La Lande, US 2760854 (1956 to Pennsylvania Salt).

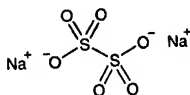
THERAP CAT: Anti-infective (topical).

8684. Sodium Dicyanoaurate(I). [15280-09-8] Gold sodium cyanide; sodium aurocyanide. $\text{C}_2\text{AuN}_2\text{Na}$; mol wt 271.99. C 8.83%, Au 72.42%, N 10.30%, Na 8.45%. $\text{NaAu}(\text{CN})_2$.

White, cryst powder. Sol in water. **Poison!**

USE: Goldplating.

8685. Sodium Dithionate. [7631-94-9] Dithionous acid disodium salt. $\text{Na}_2\text{O}_6\text{S}_2$; mol wt 206.10. Na 22.31%, O 46.58%, S 31.12%. Prepd according to the equations $\text{MnO}_2 + 2\text{SO}_2 \rightarrow \text{MnS}_2\text{O}_6$ and $\text{MnS}_2\text{O}_6 + \text{Na}_2\text{CO}_3 \rightarrow \text{MnCO}_3 + \text{Na}_2\text{S}_2\text{O}_6$; de Baat, *Rec. Trav. Chim.* 45, 237 (1926); Pfanstiel, *Inorg. Syn.* 2, 170 (1946).



Dihydrate. Colorless, water-clear, orthorhombic crystals. Very stable in air. d 2.189. Loses all of its water of crystn at 110° . When heated to 267° it is dissociated into Na_2SO_4 and SO_2 . Soly in water at 0° : 6.05% (w/w); at 20° : 13.39%; at 30° : 17.32%. Insol in alc.

8686. Sodium Dodecylbenzenesulfonate. [25155-30-0] Dodacylbenzenesulfonic acid sodium salt; dodecylbenzene sodium sulfonate; Santomerse #1; Conoco C-50; Conoco SD 40; Conoco C-60. $\text{C}_{18}\text{H}_{29}\text{NaO}_3\text{S}$; mol wt 348.48. C 62.04%, H 8.39%, Na 6.60%, O 13.77%, S 9.20%. $\text{C}_{12}\text{H}_{25}\text{C}_6\text{H}_4\text{SO}_3\text{Na}$. Manuf: *Chem. Eng.* 61, no. 6, 372 (1954); Huber et al., *J. Am. Oil Chem. Soc.* 33, 57 (1956); GB 761095; Seaton, US 2782230 (1956, 1957 both to Monsanto); GB 773423; Gerhart, Karwacki, US 2820056 (1957, 1958 both to Continental Oil). Toxicity study: Hopper et al., *J. Am. Pharm. Assoc. Sci. Ed.* 38, 428 (1949).

LD₅₀ in mice: 2 g/kg orally; 105 mg/kg i.v. (Hopper).

Caution: May cause skin irritation. If swallowed will cause vomiting.

USE: Anionic detergent.

8687. Sodium Ethoxide. [141-52-6] Sodium ethylate; caustic alcohol. $\text{C}_2\text{H}_5\text{NaO}$; mol wt 68.05. C 35.30%, H 7.41%, Na 33.78%, O 23.51%.

White or yellowish, hygroscopic powder. Dec on exposure to air and becomes darker on keeping. Dec by water into NaOH and alcohol. Sol without decompn in abs alc. **Keep tightly closed, protected from light and in a cool place.**

8688. Sodium Ethyl Sulfate. [546-74-7] Sodium sulfonate. $\text{C}_2\text{H}_5\text{NaO}_4\text{S}$; mol wt 148.11. C 16.22%, H 3.40%, Na 15.52%, O 43.21%, S 21.65%. $\text{NaC}_2\text{H}_5\text{SO}_4$.

Monohydrate. White, very hygroscopic crystals. Sol in 0.7 part water, in alcohol. **Keep well closed.**

USE: In organic syntheses.

8689. Sodium Ferrocyanide. [13601-19-9] Tetrasodium hexakis(cyano-C)ferrate(4-); sodium hexacyanoferrate(II); yellow prussiate of soda; sodium prussiate yellow. $\text{C}_6\text{FeN}_6\text{Na}_4$; mol wt 303.91. C 23.71%, Fe 18.38%, N 27.65%, Na 30.26%. $\text{Na}_4\text{Fe}(\text{CN})_6$. Review of properties, chemistry and synthesis: *The Chemistry of Ferrocyanides*, American Cyanamid Co. (Bencon Press, New York, 1953) 112 pp.

Decahydrate. Pale yellow, monoclinic, slightly efflorescent crystals. Steady dehydration occurs $>50^\circ$. Becomes anhydrous at 81.5° . Dec 435° , forming sodium cyanide, iron, carbon, and nitrogen. Soly in water at 1° : 10.2% (calcd as the anhydrous salt); at 17° : 14.7%; at 25° : 17.6%; at 53° : 28.1%; at 85° : 39%; at 96.6° : 39.7%. Practically insol in most organic solvents.

Caution: Do not mix with hot or concd acids and do not expose solns to sunlight for any length of time to avoid generation of hydrogen cyanide. Waste ferrocyanides in streams and lakes should not exceed 2 ppm because irradiated solns become toxic to fish, G. E. Burdick, M. Lipschultz, *C.A.* 44, 10939 (1950). **Toxicity:** Because of strong chemical bondage between the cyanide groups and the iron, ferrocyanides have a low order of toxicity.

USE: Addition of sodium ferrocyanide solns to slightly acidic solns of iron salts causes precipitation of insol Prussian blue (ferric ferrocyanide), $\text{Fe}_4[\text{Fe}(\text{CN})_6]_3$. Alkaline solns yield sol Prussian blue, $\text{NaFe}[\text{Fe}(\text{CN})_6]$. Sodium ferrocyanide forms gels with heavy metals in general. Used in ore flotation. In photography for bleaching, toning, and fixing. To prevent caking of rock salt and foods. Additive to pickling baths. Peptizing agent in rubber. Arc stabilizer in welding rod coatings. Emulsion polymerization catalyst.

8690. Sodium Fluoborate. [13755-29-8] Sodium tetrafluoroborate; sodium borofluoride. BF_4Na ; mol wt 109.79. B 9.85%, F 69.22%, Na 20.94%. NaBF_4 . Prepd according to the equation $2\text{H}_3\text{BO}_3 + 8\text{HF} + \text{Na}_2\text{CO}_3 \rightarrow 2\text{NaBF}_4 + 7\text{H}_2\text{O} + \text{CO}_2$; Balz, Wilke-Dörfurt, *Z. Anorg. Allgem. Chem.* 159, 197 (1927); Kwasnik in *Handbook of Preparative Inorganic Chemistry*, vol. 1, G. Brauer, Ed. (Academic Press, New York, 2nd ed., 1963) p 222.

Orthorhombic, stout rectangular prisms d^{20} 2.47. mp 384° (slight decompn). Does not etch glass when absolutely dry. Soly in water (g/100 ml): 108 (26°); 210 (100°). Sparingly sol in alcohol. Aq solns have a bitter taste and are acid to litmus.

USE: Fluorinating agent, see Lawton, Levy, *J. Am. Chem. Soc.* 77, 6083 (1955).

8691. Sodium Fluoride. [7681-49-4] Chemifluor; Duraphat; Floracid; Fluoros; Flura-Drops; Karidium; Lemofluor; Lurphat; Ossalin; Ossin; Osteo-F; Osteofluor; Slow-Fluoride; idide-SF; Zymafluor. FNa ; mol wt 41.99. F 45.25%, Na 54.75%. NaF. Prepd by fusing cryolite with NaOH; by adding equiv amounts of NaOH or Na_2CO_3 to 40% HF (precipitation is instantaneous and crystal size depends on pH, but too much HF yields sodium bifluoride, NaHF_2). Müller, *Chem. Ztg.* 52, 5 (1928); Kwasnik in *Handbook of Preparative Inorganic Chemistry*, vol. 1, G. Brauer, Ed. (Academic Press, New York, 2nd ed., 1963) pp 235-236. Technical grades are 90% and 95%. The NaF, light (37 cu in/lb) and dense (23 cu in/lb), and 98%. The impurities are mainly sodium and aluminum fluosilicates. Pharmacology: Caruso et al., *Handb. Exp. Pharmacol.* XX (Part 2), F. Smith, Ed. (Springer, Berlin, 1970) pp 144-165. Toxicity: H. F. Smyth et al., *Am. Ind. Hyg. Assoc. J.* 30, 470 (1969). Carcinogenicity studies: J. R. Bucher et al., *Int. J. Cancer* 48, 733 (1991). Review of toxicology: D. W. Banting, *J. Am. Dent. Assoc.* 122, 86-91 (1991). Review of clinical efficacy in prevention of dental caries: L. G. Petersson, *Caries Res.* 27, Suppl 1, 35-42 (1993); of clinical experience in osteoporosis: M. Kleerekoper, D. B. Mendlovic, *Endocr. Rev.* 14, 312-323 (1993).

Cubic or tetragonal crystals (NaCl lattice). d 2.78. mp 993° . bp 1704° . **Poisonous!** Soly in water (g/100 ml): 4.0 (15°); 4.3 (25°); 5.0 (100°). Insol in alc. Aq solns have an alkaline reaction caused by partial hydrolysis. pH of freshly prepd satd soln 7.4. Aq solns etch glass, but the dry crystals or powder may be kept in glass bottles. Sodium fluoride sold as household insecticide must be tinted Nile Blue. **LD₅₀** orally in rats: 0.18 g/kg (Smyth).